<center>**REMARKS**</center>

The Examiner rejected Claims 1, 9, 17, 31, 39-50, 85, 93, and 94 under the judicially created doctrine of obviousness-type double patenting over Patent Number 6,915,237 (Hashemian '237) in view of Patent Number 6,973,413 (Hashemian '413). The Examiner rejected Claims 1, 3,6-12, 17, 31-37, 39-51, 53, 54, 85-88, 93, 94, 97, and 99-101 under 35 U.S.C. § 102(e) as being anticipated by Hashemian '237. The Examiner found allowable subject matter in Claims 2, 4, 5, 52, 95, 96, and 98, but objected to these because they depended from a rejected base claim. The Examiner allowed claims 13 and 15.

Objected to Claims 2, 4, 5, 52, 95, 96, and 98 have been amended and Claims 1, 3, 6-12, 17, 31-37, 39-51, 53, 54, 85-88, 93, 94, 97, and 99-101 have been cancelled without prejudice. Applicant respectfully submits that Claims 2, 4, 5, 13, 15, 52, 95, 96, and 98 are allowable.

Claims with Objections

Examiner Nghiem stated that Claims 2, 4, 5, 52, 95, 96, and 98 contained allowable subject matter. The Examiner said the claims would be allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims. Dependent Claims 2, 4, 5, 52, 95, 96, and 98 have been rewritten and re-presented in independent form, and the amended claims include all the limitations of the independent base claims and any intervening dependent claims. Accordingly, Applicants respectfully submit that the objection to Claims 2, 4, 5, 52, 95, 96, and 98 has been overcome.

Placing Application in Condition for Allowance

Applicants desire a patent to be issued as soon as possible. Toward that end, Applicants cancel all the rejected claims, leaving only those claims in the Application that Examiner Nghiem has indicated in Paper No. 20070409 as containing allowable subject matter.

Accordingly, Applicants cancel claims 1, 3, 6-12, 14, 16-51, 53-94, 97, and 99-101, without prejudice. To avoid any future assertion that Applicants acquiesce in the

Examiner's reasons for rejection included in Paper Number 20070409, Applicants offer the following:

Rejection Under 35 U.S.C. § 112, second paragraph

The Examiner rejected Claims 17 and 93-101 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner asserts that Claim 17 includes a step of removing any outliers from said data set that is related to the step of removing a set of deviating data from said data set. Applicants point out that the two sub-steps occur at different steps. Paper No. 20070409, at. 2. The Examiner is referred to Figure 4, which discloses the steps of loading a data set, selecting for analysis, removing a set of deviating data, and analyzing a set of remaining data. These steps, in turn, include further steps as disclosed in the other figures and the Specification. See, for example, Figures 5, 7, 9, 10, and 11, among other figures. Accordingly, Applicants respectfully submit that the claimed as drafted is supported by the Specification and Figures.

The Examiner points out that Claim 93 includes steps that are not related. Applicants submit that the relationship between the set of data, the set of remaining data, and the set of deviating data are clear when the claim is read in view of the Specification. But, to clear up any ambiguity, applicant has amended Claims 95, 96, and 98 to clearly specify the relationship between the steps. Applicants note that, although the Examiner has rejected Claims 93-101 under 35 U.S.C. § 112, second paragraph, the Examiner found allowable subject matter for Claims 95, 96, and 98.

Double Patenting

Examiner rejected Claims 1, 9, 17, 31, 39-50, 85, 93, and 94 under the judicially created doctrine of obviousness-type double patenting over Patent Number 6,915,237 (Hashemian '237) in view of Patent Number 6,973,413 (Hashemian '413). Applicants respectfully submit that the cited patents are not proper references to support such a rejection. Applicants note that Hashemian '413 is based on a divisional application from the parent application that matured into Hashemian '237.

Accordingly, the disclosure contained in the two patents is almost identical with the patents differing primarily in the claims.

Both Hashemian '237 and Hashemian '413 disclose systems for "verifying the performance of process instruments as well as the process itself. More particularly, this invention pertains to providing predictive maintenance and management of aging of plant instruments and processes." Hashemian '237, Col. 1, lines 8-9; Hashemian '413, Col. 1, lines 16-20.

Hashemian '237 and Hashemian '413 both disclose cross calibration as included in the corrective action **210** as one of several enumerated in situ tests. Hashemian '237, Col. 4, lines 58-63; Hashemian '413, Col. 4, lines 60-65. A person having ordinary skill in the art at the time the Application was filed recognized that "in situ testing" means testing performed on instruments "in place" by performing the test with the instrument installed in place. This form of in situ testing is a manual operation and contrasted to shop testing in which the instrument is removed from its installed location and tested in a shop. It is noted that neither Hashemian '237 nor Hashemian '413 disclose how cross calibration is performed nor do the patents disclose that the computer **110** performs the cross calibration by executing instructions.

Applicants respectfully submit that the rejection of Claims 1, 9, 17, 31, 39-50, 85, 93, and 94 is improper because at least one element and/or limitation of each of the claims is missing from one or both of the cited patents. The following identifies one element and/or limitation from each of the subject claims that is not found in either Hashemian '237 or Hashemian '413.

Claim 1 includes the requirement of "said plurality of measured process values including a plurality of temperature measurements obtained during isothermal conditions." Neither the word "isothermal" nor that specific plant condition is disclosed in either of the cited patents. Accordingly, that requirement of Claim 1 is not disclosed by Hashemian '237 as asserted by the Examiner. Claim 9 depends from Claim 1 and is allowable because Claim 1 is allowable.

Claims 17, 31, and 39 include the requirement of "analyzing a set of remaining data for cross-calibration of said plurality of instruments with a set of results of said step of analyzing stored for reporting of said set of results." The Examiner cites Hashemian '237 Claim 1 as disclosing this requirement. Paper No. 20070409, at 4. A close reading of Claim 1 does not indicate that the referenced claim discloses "analyzing a set of remaining data for cross-calibration." Neither the phrase "cross-calibration" nor a pseudonym for that phrase appears in Claim 1. Accordingly, that requirement of Claims 17, 31, and 39 are not disclosed by Hashemian '237 as asserted by the Examiner. Claims 40-50 depend from Claim 39 and are allowable because Claim 39 is allowable.

Claim 85 requires step (e) of "recalibrating a deviating instrument," that step being embodied in "a program of instructions executable by the machine to perform method steps for automating cross calibrations of plant instruments." The Examiner cites Hashemian '237 Claim 1 (lines 21-22) as disclosing this requirement. Paper No. 20070409, at 4. Claim 1 of Hashemian '237 states the step of "determining whether a corrective action is required by said analysis results, if corrective action is required, initiating said corrective action by communicating with said output device." Reading that step in context with the rest of the claim and the patent discloses that the system provides information via an output device that allows a human to perform the corrective action, whatever that may require. Hashemian '237 does not disclose a machine that performs the step of "recalibrating a deviating instrument," with that machine being the same one performing the other steps. Claim 93 includes a similar step that is not disclosed by Hashemian '237. Accordingly, that requirement of Claims 85 and 93 are not disclosed by Hashemian '237 as asserted by the Examiner. Claim 94 depends from Claim 93 and is allowable because the base claim is allowable.

Because only one missing element and/or limitation is all that is necessary to overcome such a rejection, Applicants do not identify other claimed elements and limitations that are missing from the cited references. Applicants respectfully submit that the prior art is distinguished by other features as recited in the claims.

Rejection Under 35 U.S.C. § 102(b)

Addressing the Examiner's rejection of Claims 1, 10-12, 17, 31, 39, 51, 85, and 93 under 35 U.S.C. § 102(e), Applicant respectfully suggests that Hashemian '237 does not anticipate the claims of the present invention. Section 2131 of the Manual of Patent Examining Procedure describes the basis for anticipation under 35 U.S.C. § 102(e). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). In addition to the specific limitations identified below, Applicants respectfully submit that the prior art is distinguished by other features as recited in the claims.

As stated above, Hashemian '237 does not disclose a "plurality of measured process values including a plurality of temperature measurements obtained during isothermal conditions," which is a limitation of Claims 1 and 54. Hashemian '237 does not disclose "analyzing a set of remaining data for cross-calibration," which is a limitation of Claims 1, 10, 11, 12, 17, 31, 39, 85, and 93.

Hashemian '237 does not disclose "recalibrating" an instrument, which is a limitation of Claims 1, 10, 11, 12, 85, and 93.

Hashemian '237 does not disclose "selecting said set of data consisting of a plurality of data points that fall within a specified range and calculating an upper temperature and a lower temperature for at least one region" as being performed by a processor or computer in conjunction with the other steps claimed in Claims 3 and 97.

Hashemian '237 does not disclose "calculating new coefficients for said deviating instrument" as being performed by a processor or computer in conjunction with the other steps claimed in Claims 6, 10-12, 32, 86, and 99.

Hashemian '237 does not disclose "calculating a recalibration uncertainty value for said deviating instrument" as being performed by a processor or computer in conjunction with the other steps claimed in Claims 7, 10-12, 33, 87, and 100.

Hashemian '237 does not disclose "calculating resistance versus temperature for said deviating instrument, calculating new coefficients for said deviating instrument, producing a recalibration curve, and calculating a recalibration uncertainty value" as being performed by a processor or computer in conjunction with the other steps claimed in Claims 8, 34, 88, and 101.

Hashemian '237 does not disclose "said plurality of measured process values obtained during equilibrium conditions," which is a limitation of Claim 11. It is noted that the phrase "equilibrium conditions" describes a limitation that must be disclosed in the cited art, but a word search of the patent does not return that phrase, nor does the cited patent contain any analogous phrases or terms.

Hashemian '237 does not disclose "calculating a recalibration curve that includes determining a difference between a measured temperature value and a recalibrated temperature value," which is a limitation of Claim 35. The Examiner asserts that such limitation is "inherent with determining whether a group of temperature sensors have lost their calibration." Paper No. 20070409, at 11. Applicants respectfully submit that such a step is not inherent because Hashemian '237 does not disclose a processor performing that step in conjunction with the other claimed steps.

Hashemian '237 does not disclose "calculating a recalibration uncertainty value and extrapolating said recalibration uncertainty value to accommodate a limit value" as being performed by a processor or computer in conjunction with the other steps required by Claim 36. Further, Hashemian '237 does not disclose calculating recalibration uncertainty values.

Hashemian '237 does not disclose "calculating a recalibration uncertainty value and adjusting a limit value to accommodate said recalibration uncertainty value as being performed by a processor or computer in conjunction with the other steps

required by Claim 37. Further, Hashemian '237 does not disclose calculating recalibration uncertainty values.

Hashemian '237 does not disclose "determining at least one average value from said data set" nor "determining new coefficients for any one of said plurality of instruments that produce at least one data point in said set of deviating data, said new coefficients stored for reporting of said new coefficients" as being performed by a processor or computer in conjunction with the other steps required by Claim 51. A person having ordinary skill in the art at the time the Application was filed would understand that a calibration table as disclosed in Hashemian '237 is a table of input values versus calibrated output values and that such a table does not need or require coefficients.

With respect to Claim 85, Examiner Nghiem recites the claim preamble without identifying the individual steps. Paper No. 20070409, at 15. A proper rejection of a claim must find all the elements and steps of the claim in the prior art to support an anticipation rejection. Further, Applicants refute that Hashemian '237 discloses "a program of instructions executable by the machine to perform method steps for automating cross calibrations of plant instruments" because Hashemian '237 does not disclose a processor having instructions to perform cross calibrations.

Conclusion

In view of the cancellation of all rejected claims and the amendment of all objected to claims, it is believed that the above-identified patent application is in a condition for the issuance of a Notice of Allowance. Such action by the Examiner is respectfully requested. If, however, the Examiner is of the opinion that any of the drawings or other portions of the application are still not allowable, it will be appreciated if the Examiner will telephone the undersigned to expedite the prosecution of the application.

Please charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 50-3827 (06024-UPA).

Respectfully submitted,

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